

REVISED BY:	DATE:
J. LARSON	DEC. 12, 2012
APPROVED BY:	DATE:

APPROVED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____



**Montana Fish,
Wildlife & Parks**

WASTEWATER DETAILS

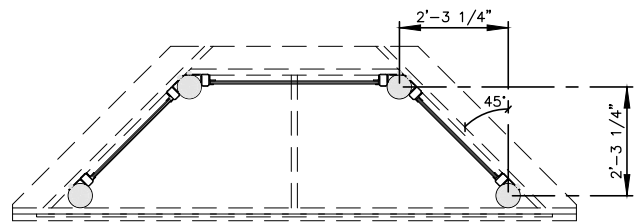
TONGUE RIVER RESERVOIR STATE PARK

FWP #7096502



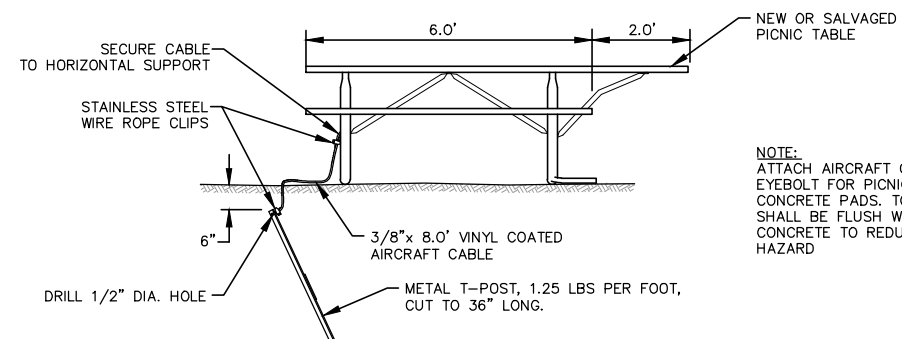
28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET: C16



NOTE:
CONTRACTOR IS RESPONSIBLE TO
REPLACE ANY MATERIALS DAMAGED
DURING DECONSTRUCTION AND
TRANSPORT OF SALVAGED KIOSK.

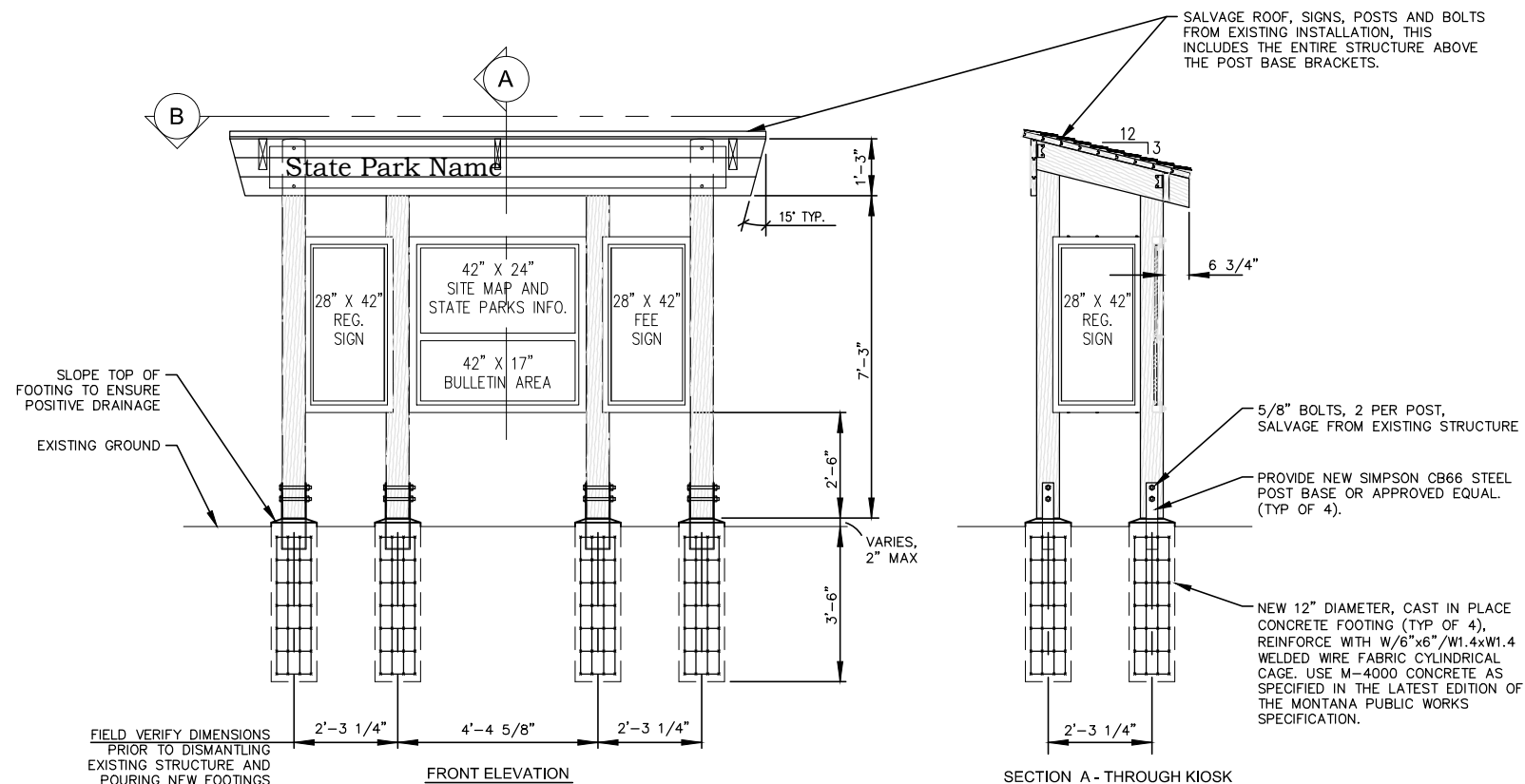
SECTION B - PLAN VIEW



NOTE:
ATTACH AIRCRAFT CABLE TO SS
EYEBOLT FOR PICNIC TABLES ON
CONCRETE PADS. TOP OF EYE BOLT
SHALL BE FLUSH WITH TOP OF
CONCRETE TO REDUCE TRIPPING
HAZARD

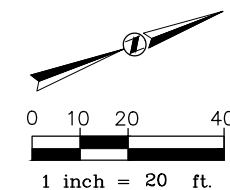
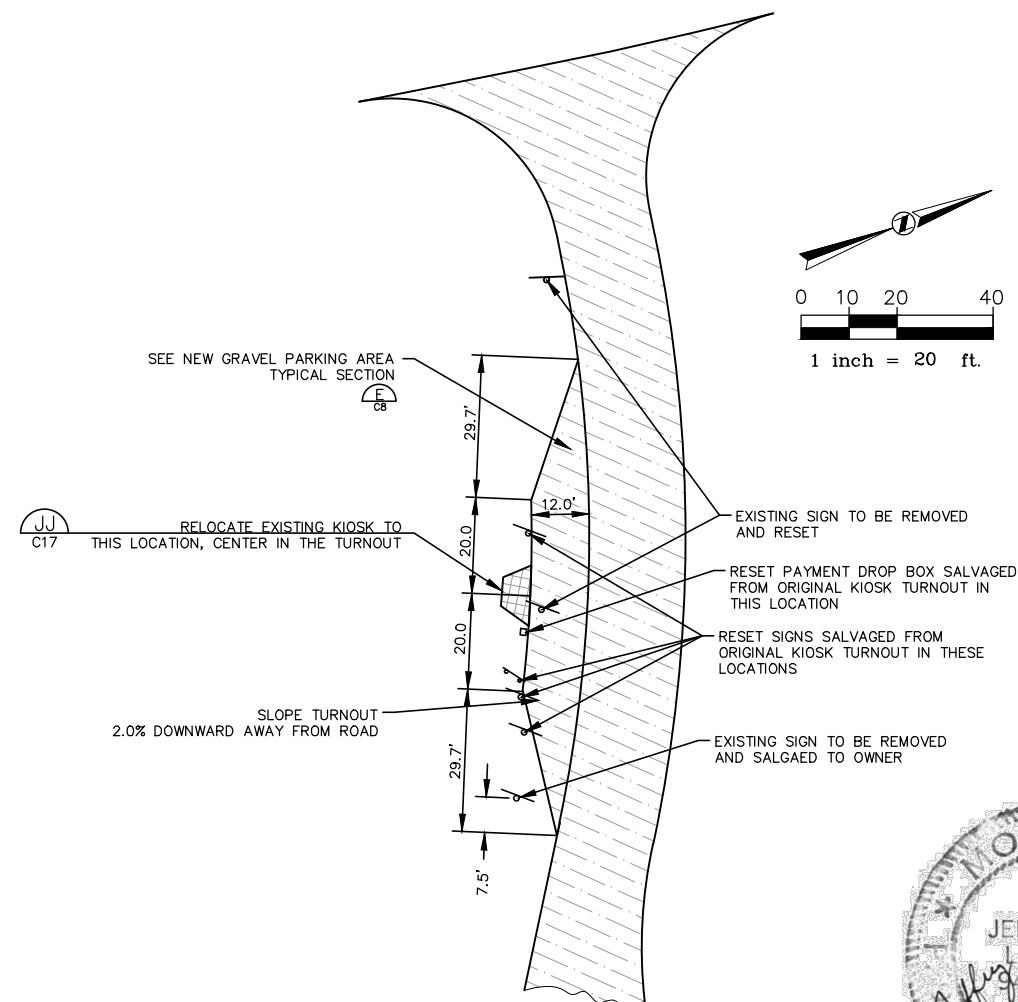
PICNIC TABLE DETAIL
NO SCALE

KK
C9,C10,C11

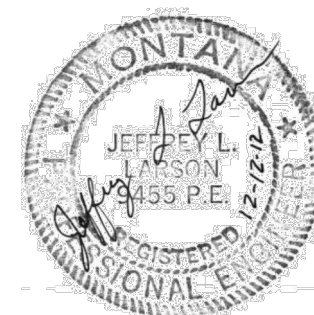


KIOSK RELOCATION DETAILS
NO SCALE

JJ
C3,C17



KIOSK TURNOUT DETAILS
C3



J. LARSON DEC. 12, 2012
DRAWN BY: DATE:
J. LARSON DEC. 12, 2012
CHECKED BY: DATE:

REVISED BY: DATE:
J. LARSON DEC. 12, 2012
APPROVED BY: DATE:

APPROVED BY: DATE:
APPROVED BY: DATE:



**Montana Fish,
Wildlife & Parks**

KIOSK DETAILS
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502

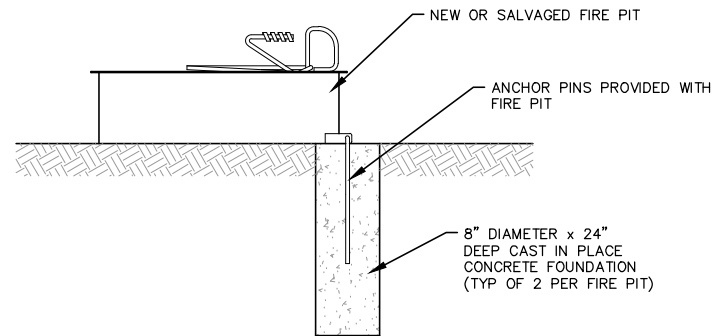
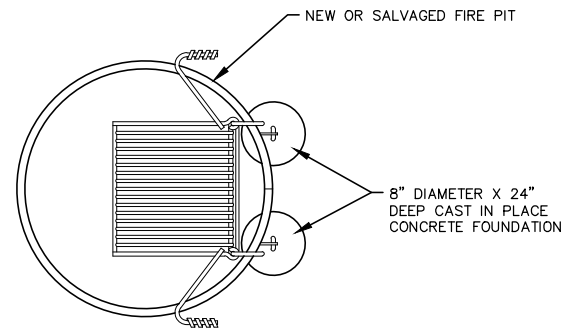


28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET: **C17**

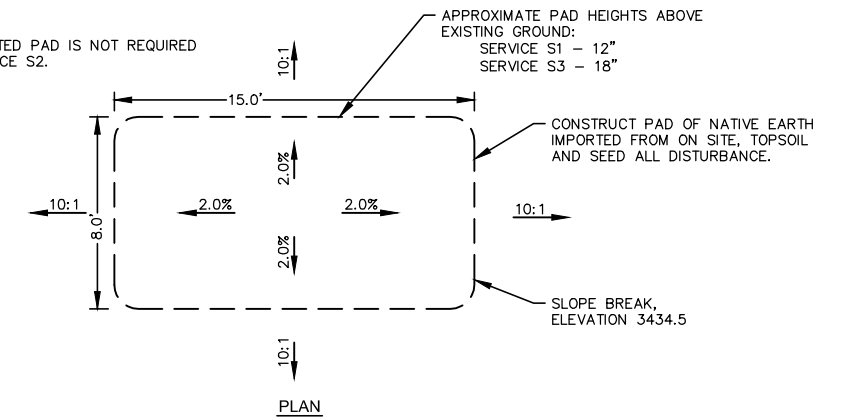
NOTES:

1. THE FOUNDATIONS OF SALVAGED FIRE PITS MAY BE RELOCATED OR REPLACED AT THE OPTION OF THE CONTRACTOR.
2. INSTALLATION OF ADA FIRE PITS IS SIMILAR, BUT REQUIRES THE INSTALLATION OF (3) 8" DIAMETER X 24" DEEP FOUNDATIONS AND 10-3/8" OF GRAVEL FILL INSIDE THE RING.
3. FIRE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS

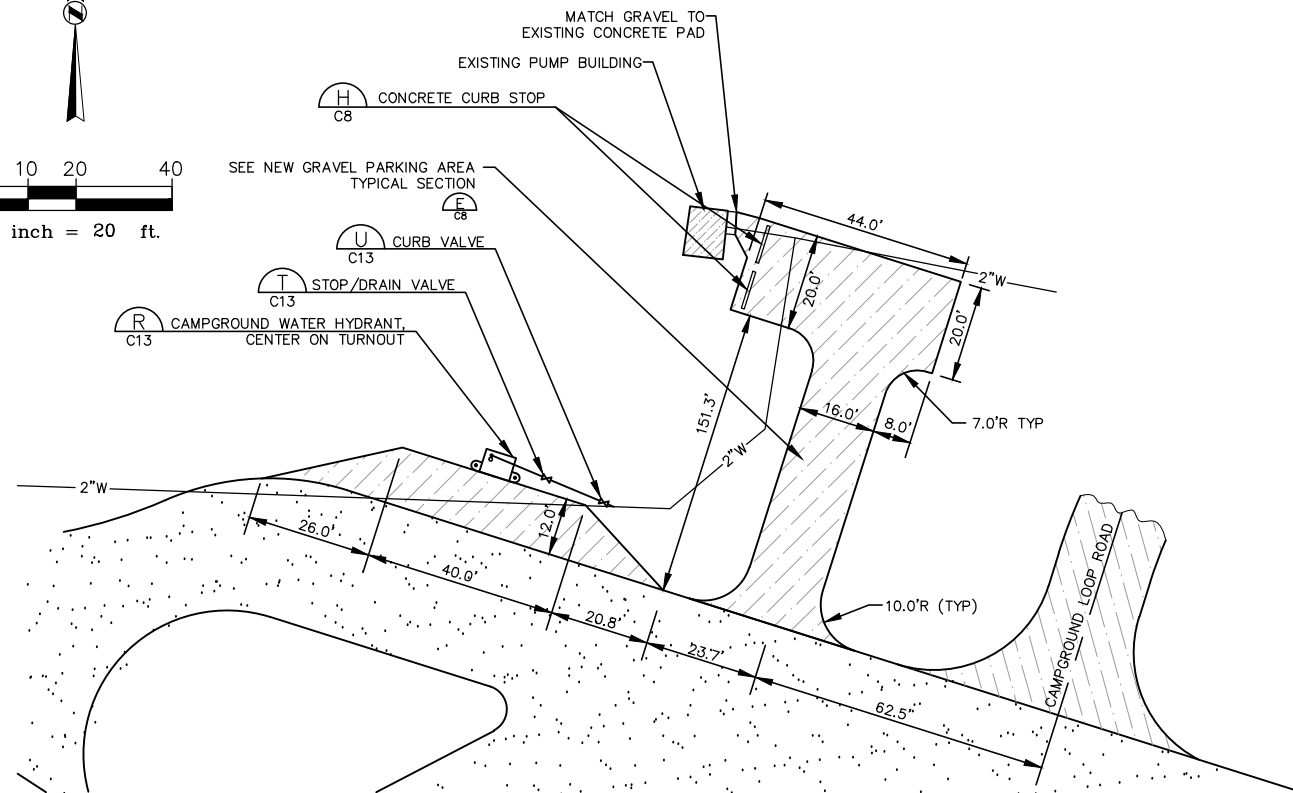
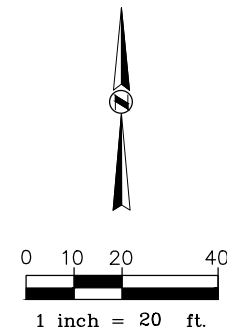


FIRE PIT DETAIL
NO SCALE

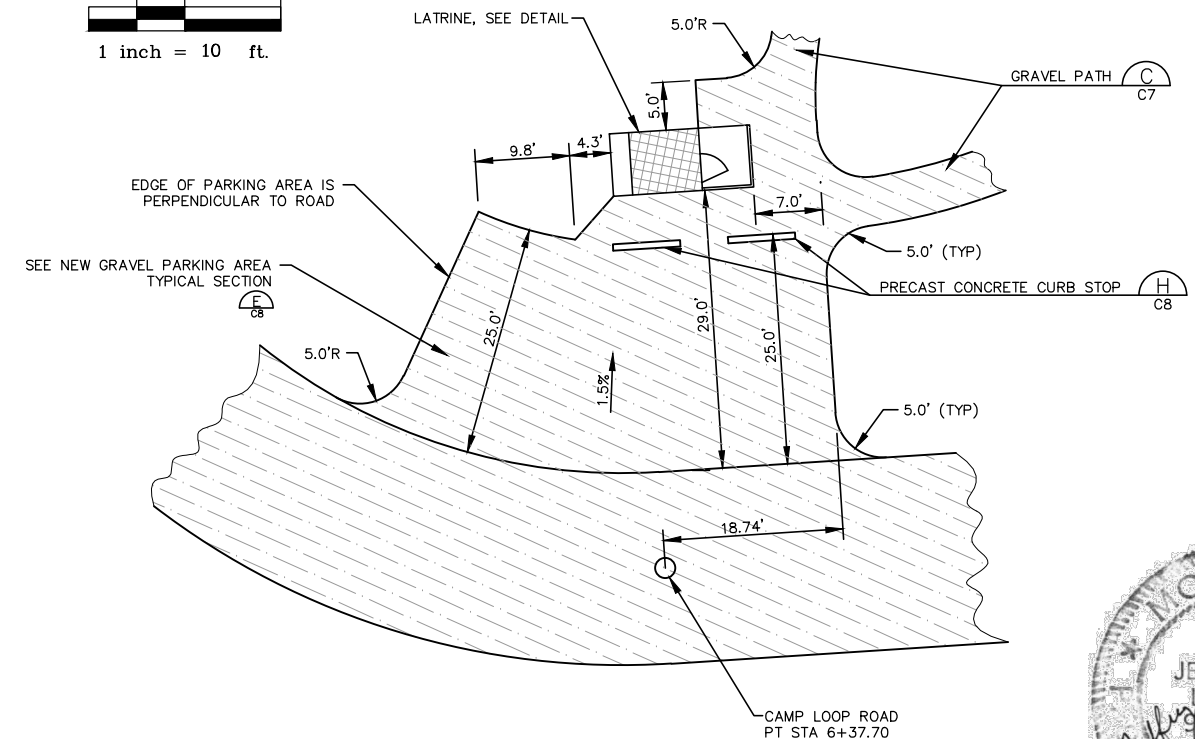
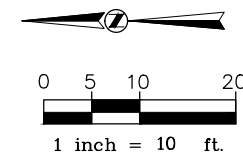
NOTE:
AN ELEVATED PAD IS NOT REQUIRED FOR SERVICE S2.



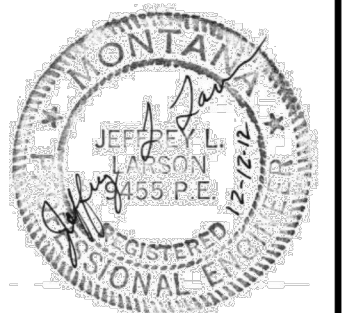
ELECTRICAL SERVICE ELEVATED PAD
NO SCALE



WATER HYDRANT AND PUMP BUILDING TURNOUTS



LATRINE TURNOUT DETAILS



J. LARSON DEC. 12, 2012
DRAWN BY: DATE:
J. LARSON DEC. 12, 2012
CHECKED BY: DATE:

REVISED BY: DATE:
J. LARSON DEC. 12, 2012
APPROVED BY: DATE:

APPROVED BY: DATE:
APPROVED BY: DATE:

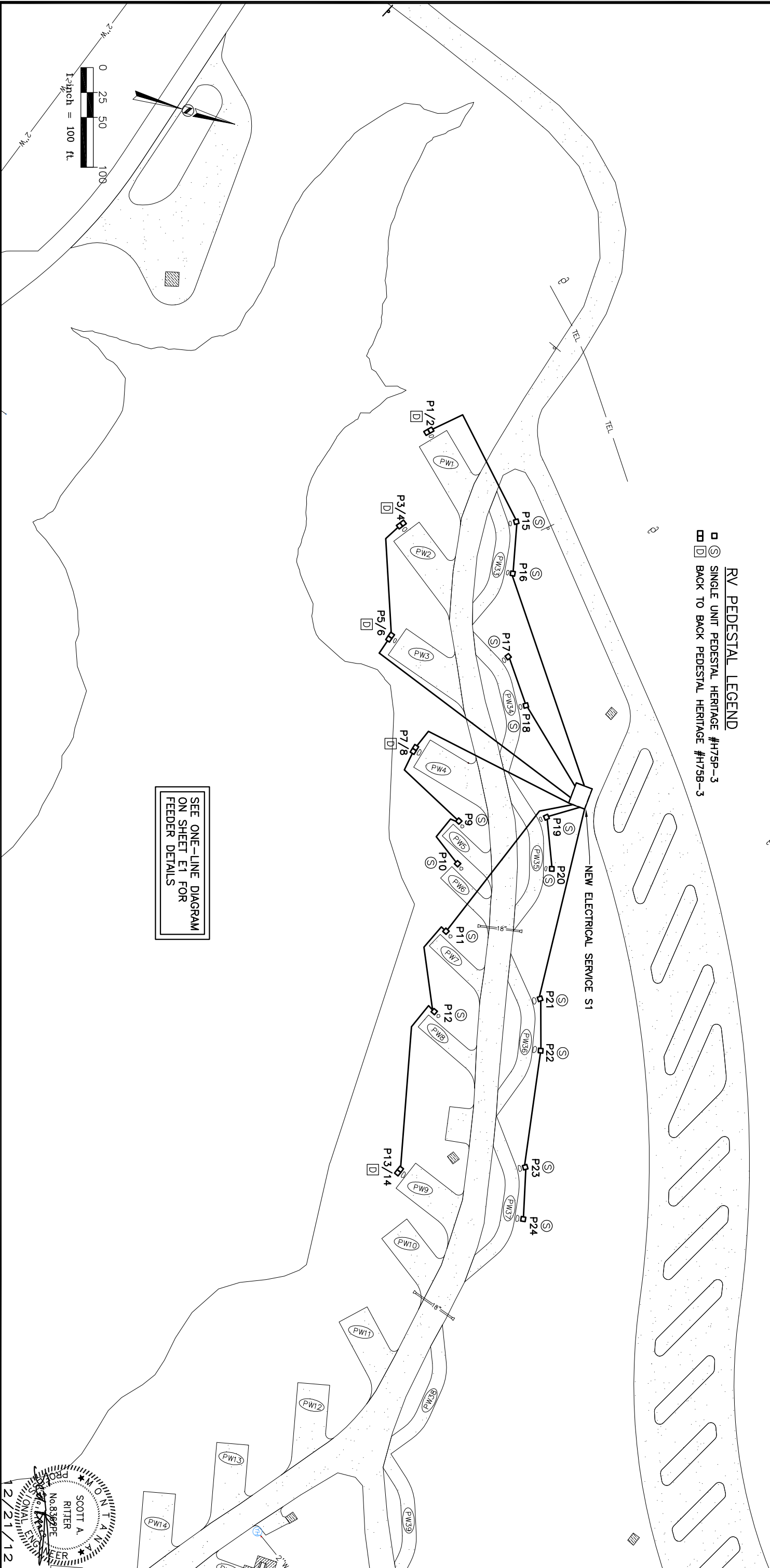


LATRINE TURNOUT DETAIL
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502

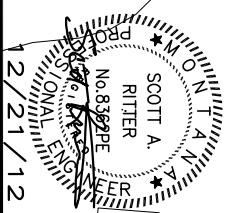
LARSON CIVIL
ENGINEERING, LLC
28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET: **C18**

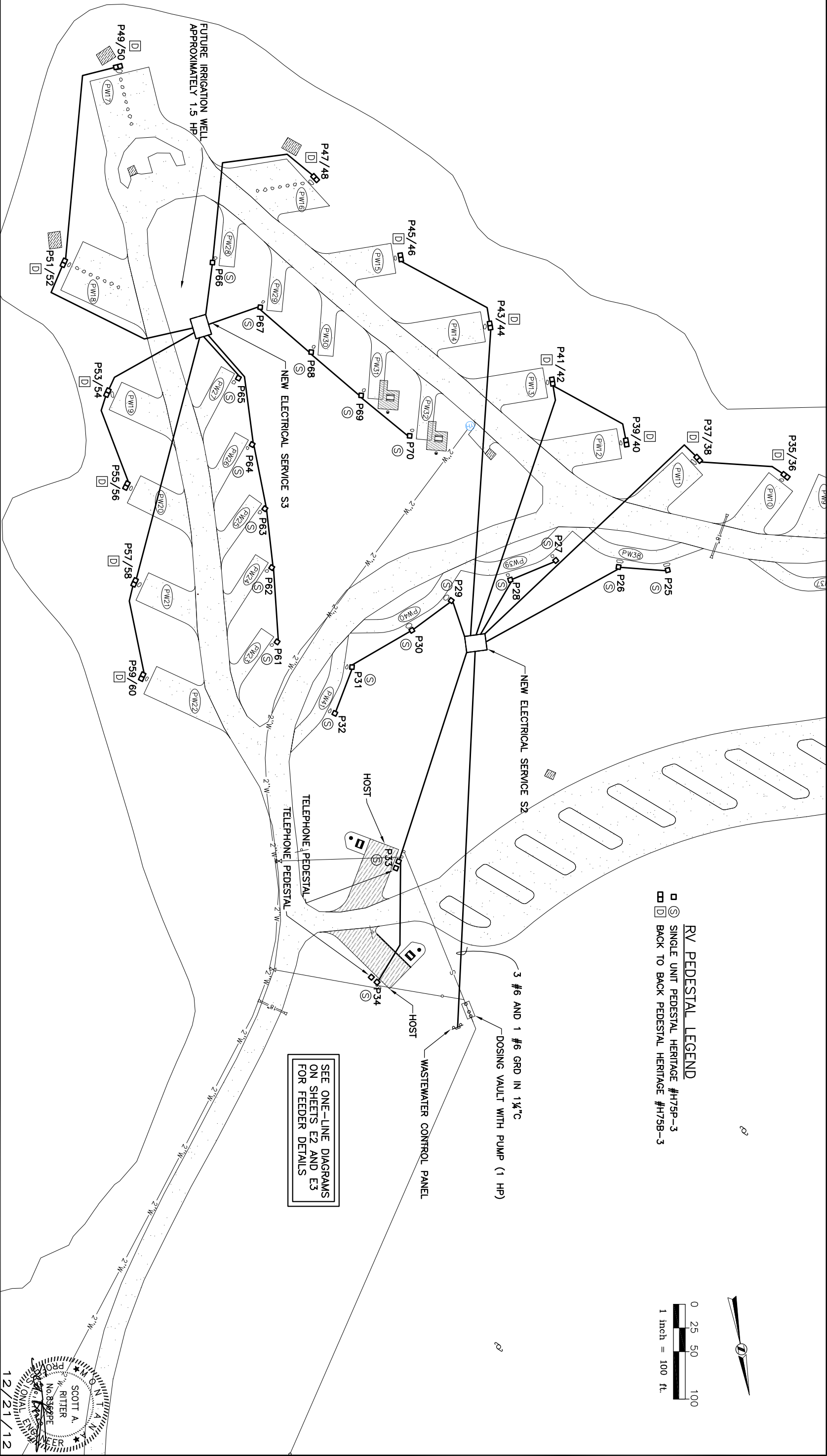
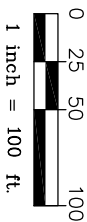
- RV PEDESTAL LEGEND**
- (S) SINGLE UNIT PEDESTAL HERITAGE #H7SP-3
 - (D) BACK TO BACK PEDESTAL HERITAGE #H7SB-3



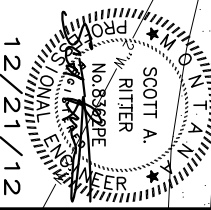
RH		DECEMBER 21, 2012	
DRAWN BY:		DATE:	
SR		DECEMBER 21, 2012	
CHECKED BY:		DATE:	
REVISD BY:		DATE:	
SR		DECEMBER 21, 2012	
APPROVED BY:		DATE:	
APPROVED BY:		DATE:	
		PEE WEE POINT SOUTH 1 SITE PLAN	
		TONGUE RIVER RESERVOIR STATE PARK	
		FWP #7096502	
		28 ANTLER AVENUE CLANCY, MT 59634 406-443-6111 jeff@larsonce.com	
SHEET:		ES1	



RV PEDESTAL LEGEND
□ SINGLE UNIT PEDESTAL HERITAGE #H75P-3
Ⓢ BACK TO BACK PEDESTAL HERITAGE #H75B-3



SEE ONE-LINE DIAGRAMS
ON SHEETS E2 AND E3
FOR FEEDER DETAILS



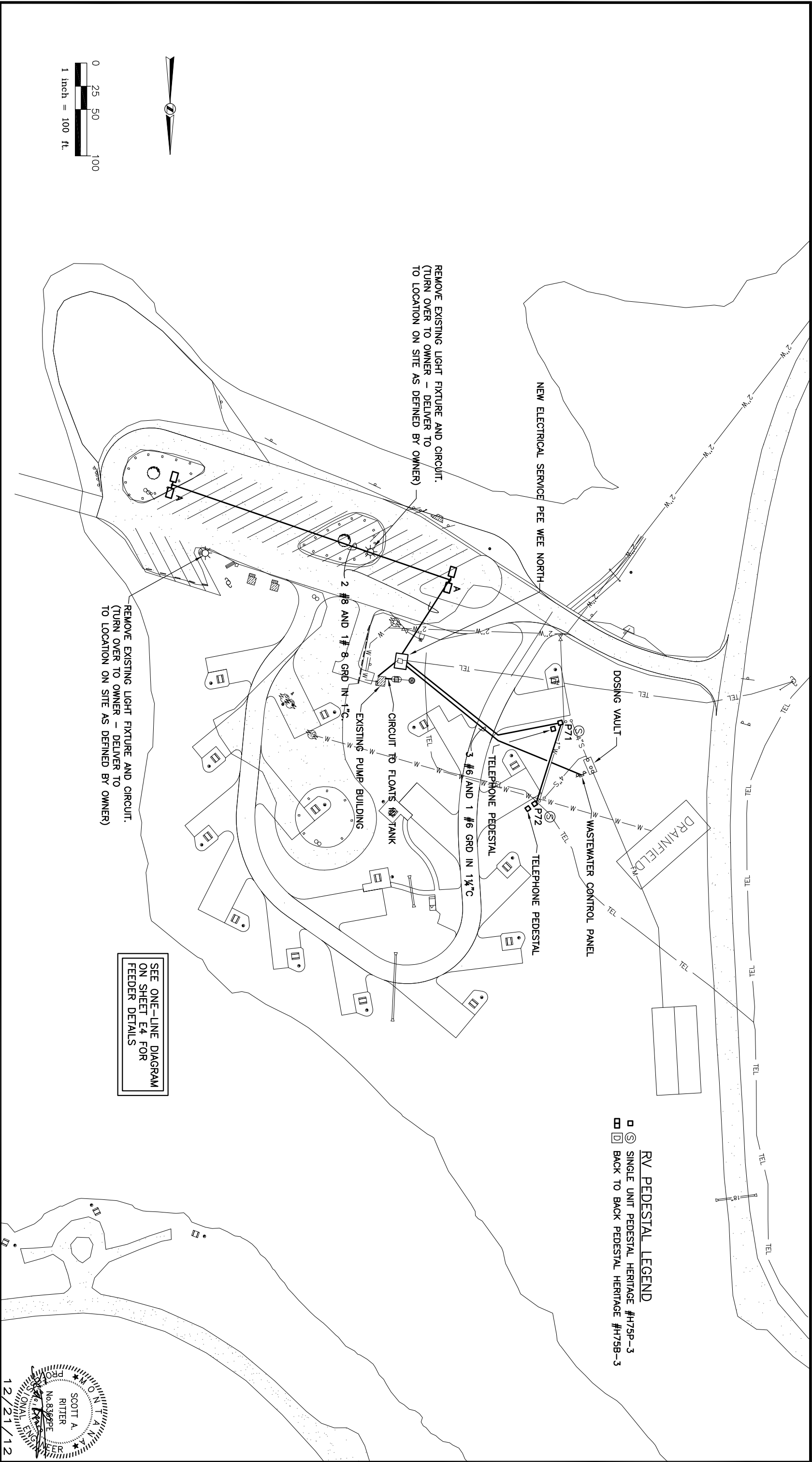
RH	DECEMBER 21, 2012	REVISD BY:	DATE:	APPROVED BY:	DATE:
DRAWN BY:	SR	DECEMBER 21, 2012	APPROVED BY:	DATE:	
CHECKED BY:	DATE:				

**Montana Fish,
Wildlife & Parks**

PEE WEE POINT SOUTH 2 SITE PLAN
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502

**LARSON
CIVIL
ENGINEERING, LLC**
28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET: ES2



- RV PEDESTAL LEGEND**
- ○ SINGLE UNIT PEDESTAL HERITAGE #H75P-3
 - □ BACK TO BACK PEDESTAL HERITAGE #H75B-3

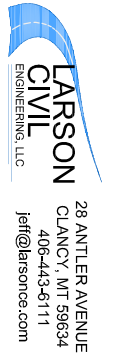
RH	DECEMBER 21, 2012
DRAWN BY:	DATE:
SR	DECEMBER 21, 2012
CHECKED BY:	DATE:

REVISD BY:	DATE:
SR	DECEMBER 21, 2012
APPROVED BY:	DATE:

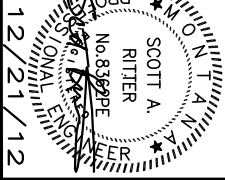


**Montana Fish,
Wildlife & Parks**

PEE WEE POINT NORTH SITE PLAN
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



SHEET: ES3



ELECTRICAL NOTES FOR THIS SHEET:

- 1

ELECTRIC UTILITY WILL INSTALL CT'S INSIDE TRANSFORMER CABINET
- 2

ELECTRIC UTILITY WILL PROVIDE AND INSTALL METER AND ENTIRE METER LOOP.
- 3

ELECTRIC UTILITY WILL PROVIDE SERVICE TRANSFORMER
- 4

CONSTRUCT A STURDY UNISTRUT RACK TO SUPPORT ELECTRICAL PANEL. RACK LEGS SHALL BE ENCASED IN CONCRETE FOR A MINIMUM OF 48-INCHES BELOW GRADE.
- 5

BOND AND GROUND SERVICE PER NEC
- 6

#3/0 CU IN 1" C TO METALLIC WATER SERVICE IF AVAILABLE.
- 7

#3/0 CU IN 1" C TO REBAR AND STEEL IN PAD
- 8

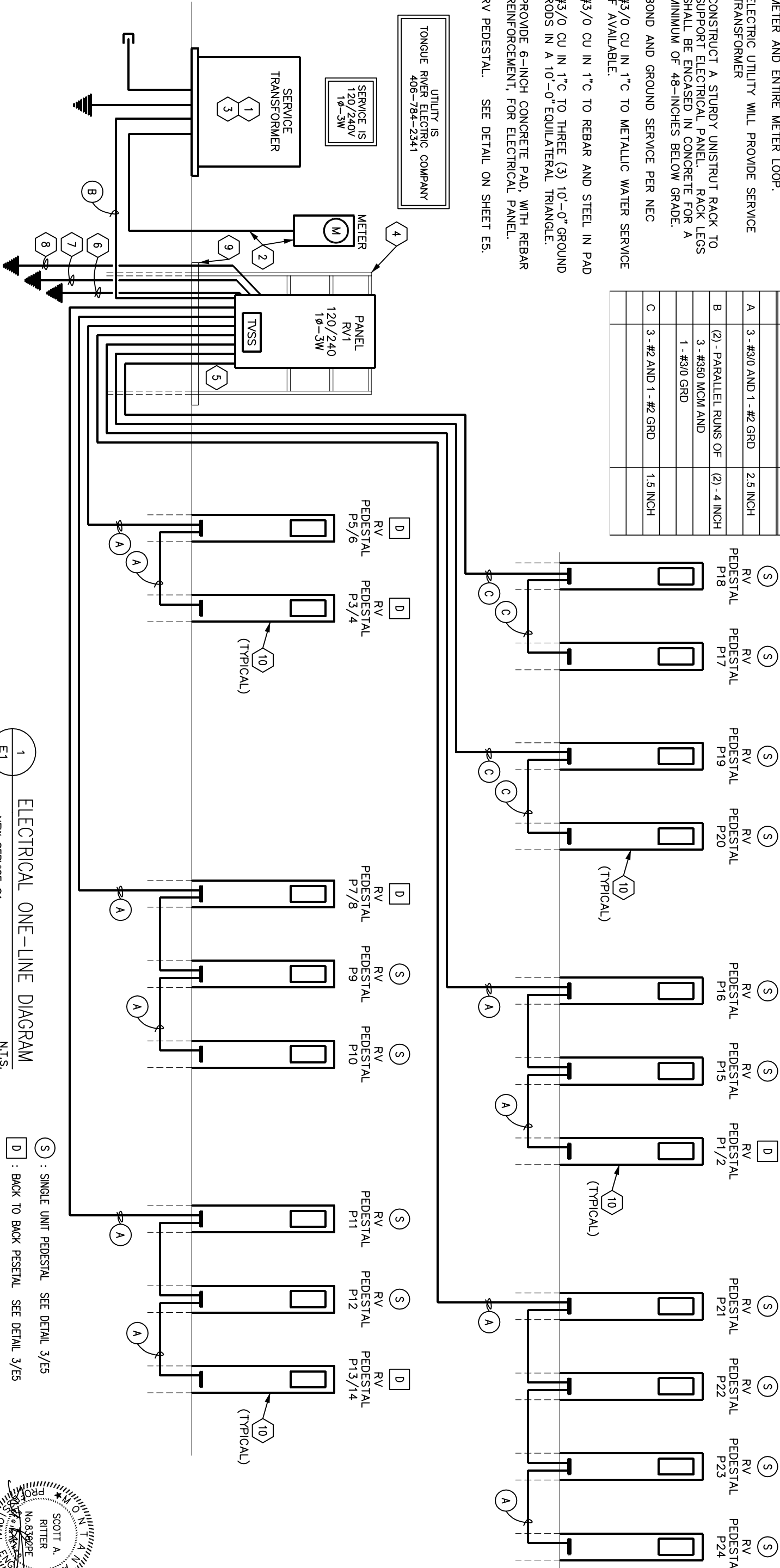
#3/0 CU IN 1" C TO THREE (3) 10'-0" GROUND RODS IN A 10'-0" EQUILATERAL TRIANGLE.
- 9

PROVIDE 6-INCH CONCRETE PAD, WITH REBAR REINFORCEMENT, FOR ELECTRICAL PANEL.
- 10

RV PEDESTAL. SEE DETAIL ON SHEET E5.

FEEDER SCHEDULE		
TAG	CONDUCTORS	CONDUIT
A	3 - #3/0 AND 1 - #2 GRD	2.5 INCH
B	(2) - PARALLEL RUNS OF 3 - #350 MCM AND 1 - #3/0 GRD	(2) - 4 INCH
C	3 - #2 AND 1 - #2 GRD	1.5 INCH

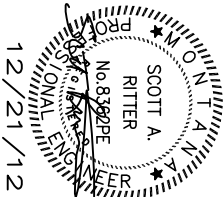
NOTE: ELECTRIC UTILITY COMPANY COSTS FOR THEIR ASSOCIATED WORK SHALL BE BILLED DIRECT TO OWNER. DO NOT INCLUDE IN BID PRICE. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COORDINATION AND SCHEDULING OF THE ELECTRIC UTILITY COMPANY'S WORK.



1
E1

ELECTRICAL ONE-LINE DIAGRAM
NEW SERVICE S1
N.T.S.

(S) : SINGLE UNIT PEDESTAL SEE DETAIL 3/E5
(D) : BACK TO BACK PEDESTAL SEE DETAIL 3/E5



RH
DRAWN BY: DATE: DECEMBER 21, 2012
SR
CHECKED BY: DATE: DECEMBER 21, 2012

REVISD BY: DATE: DECEMBER 21, 2012
SR
APPROVED BY: DATE:

APPROVED BY: DATE:
APPROVED BY: DATE:



**Montana Fish
Wildlife & Parks**

ONE-LINE DIAGRAM SERVICE S1
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jefr@larsonce.com

SHEET: **E1**

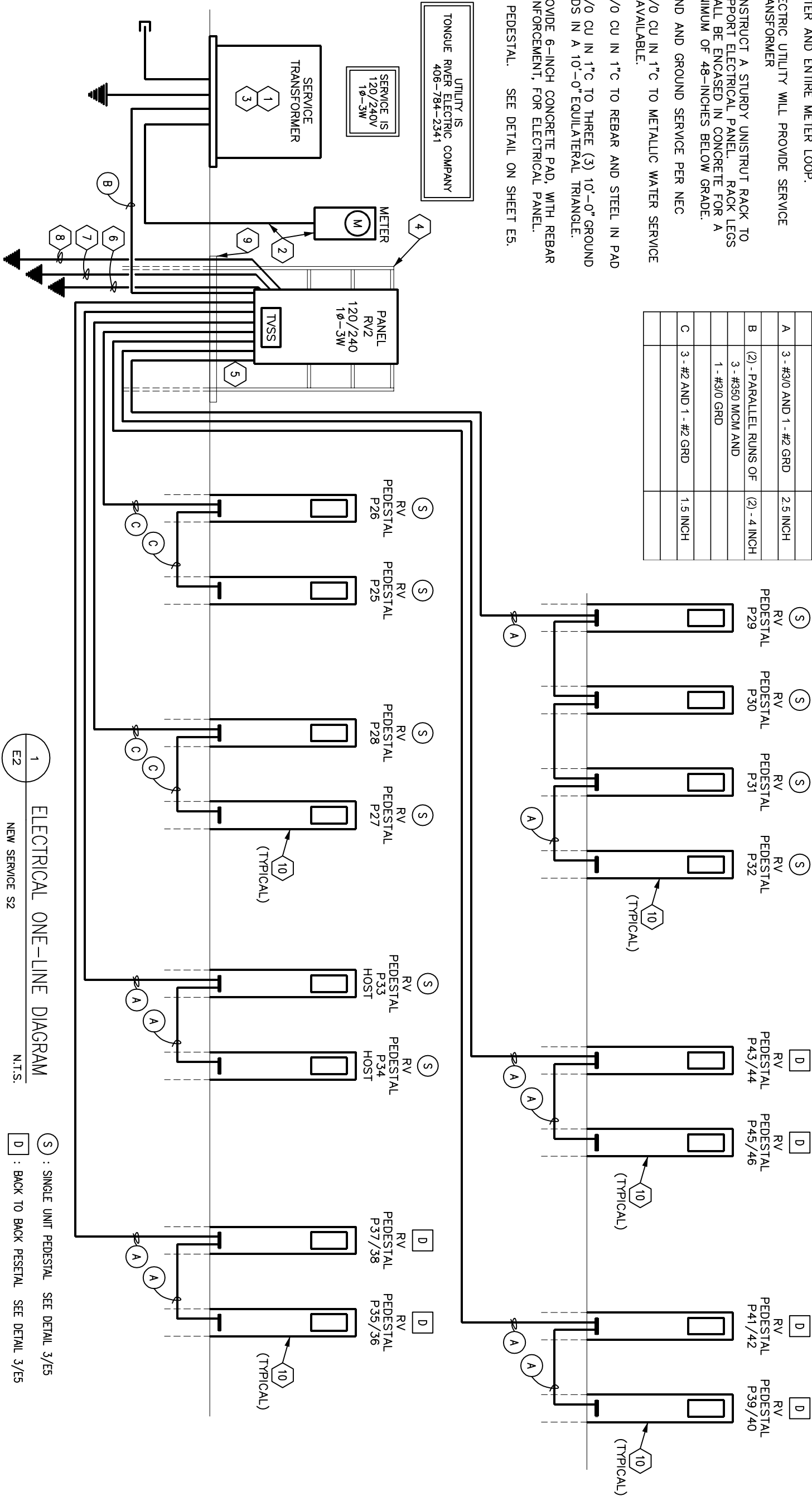
ELECTRICAL NOTES FOR THIS SHEET:

- 1
- ELECTRIC UTILITY WILL INSTALL CT'S INSIDE TRANSFORMER CABINET
- 2
- ELECTRIC UTILITY WILL PROVIDE AND INSTALL METER AND ENTIRE METER LOOP.
- 3
- ELECTRIC UTILITY WILL PROVIDE SERVICE TRANSFORMER
- 4
- CONSTRUCT A STURDY UNISTRUT RACK TO SUPPORT ELECTRICAL PANEL. RACK LEGS SHALL BE ENCASED IN CONCRETE FOR A MINIMUM OF 48-INCHES BELOW GRADE.
- 5
- BOND AND GROUND SERVICE PER NEC
- 6
- #3/0 CU IN 1" C TO METALLIC WATER SERVICE IF AVAILABLE.
- 7
- #3/0 CU IN 1" C TO REBAR AND STEEL IN PAD
- 8
- #3/0 CU IN 1" C TO THREE (3) 10'-0" GROUND RODS IN A 10'-0" EQUILATERAL TRIANGLE.
- 9
- PROVIDE 6-INCH CONCRETE PAD, WITH REBAR REINFORCEMENT, FOR ELECTRICAL PANEL.
- 10
- RV PEDESTAL. SEE DETAIL ON SHEET E5.

FEEDER SCHEDULE

TAG	CONDUCTORS	CONDUIT
A	3 - #3/0 AND 1 - #2 GRD	2.5 INCH
B	(2) - PARALLEL RUNS OF 3 - #350 MCM AND 1 - #3/0 GRD	
C	3 - #2 AND 1 - #2 GRD	1.5 INCH

NOTE: ELECTRIC UTILITY COMPANY COSTS FOR THEIR ASSOCIATED WORK SHALL BE BILLED DIRECT TO OWNER. DO NOT INCLUDE IN BID PRICE. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COORDINATION AND SCHEDULING OF THE ELECTRIC UTILITY COMPANY'S WORK.



ELECTRICAL ONE-LINE DIAGRAM

1
E2

NEW SERVICE S2

N.T.S.

(S) : SINGLE UNIT PEDESTAL SEE DETAIL 3/E5

(D) : BACK TO BACK PESEIAL SEE DETAIL 3/E5

12/21/12



RH
DRAWN BY: DATE: DECEMBER 21, 2012
SR
CHECKED BY: DATE: DECEMBER 21, 2012

REVISD BY: DATE: DECEMBER 21, 2012
SR
APPROVED BY: DATE:

APPROVED BY: DATE:
APPROVED BY: DATE:



**Montana Fish,
Wildlife & Parks**

ONE-LINE DIAGRAM SERVICE S2
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET: **E2**

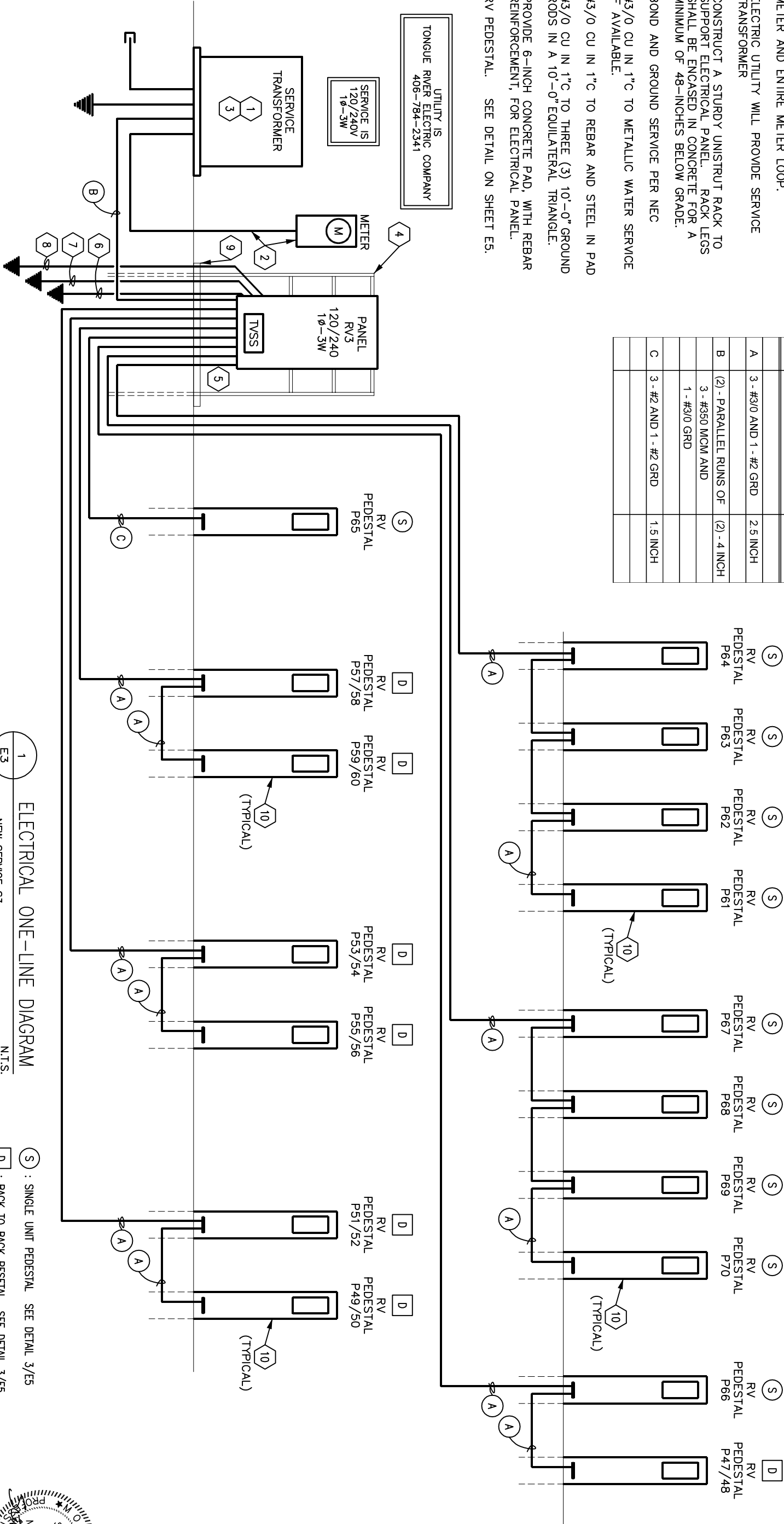
ELECTRICAL NOTES FOR THIS SHEET:

- 1ELECTRIC UTILITY WILL INSTALL CT'S INSIDE TRANSFORMER CABINET
- 2ELECTRIC UTILITY WILL PROVIDE AND INSTALL METER AND ENTIRE METER LOOP.
- 3ELECTRIC UTILITY WILL PROVIDE SERVICE TRANSFORMER
- 4CONSTRUCT A STURDY UNISTRUT RACK TO SUPPORT ELECTRICAL PANEL. RACK LEGS SHALL BE ENCASED IN CONCRETE FOR A MINIMUM OF 48-INCHES BELOW GRADE.
- 5BOND AND GROUND SERVICE PER NEC
- 6#3/0 CU IN 1" C TO METALLIC WATER SERVICE IF AVAILABLE.
- 7#3/0 CU IN 1" C TO REBAR AND STEEL IN PAD
- 8#3/0 CU IN 1" C TO THREE (3) 10'-0" GROUND RODS IN A 10'-0" EQUILATERAL TRIANGLE.
- 9PROVIDE 6-INCH CONCRETE PAD, WITH REBAR REINFORCEMENT, FOR ELECTRICAL PANEL.
- 10RV PEDESTAL. SEE DETAIL ON SHEET E5.

FEEDER SCHEDULE

TAG	CONDUCTORS	CONDUIT
A	3 - #3/0 AND 1 - #2 GRD	2.5 INCH
B	(2) - PARALLEL RUNS OF 3 - #350 MCM AND 1 - #3/0 GRD	
C	3 - #2 AND 1 - #2 GRD	1.5 INCH

NOTE: ELECTRIC UTILITY COMPANY COSTS FOR THEIR ASSOCIATED WORK SHALL BE BILLED DIRECT TO OWNER. DO NOT INCLUDE IN BID PRICE. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COORDINATION AND SCHEDULING OF THE ELECTRIC UTILITY COMPANY'S WORK.



1

ELECTRICAL ONE-LINE DIAGRAM

NEW SERVICE S3

N.T.S.

(S) : SINGLE UNIT PEDESTAL SEE DETAIL 3/E5

(D) : BACK TO BACK PESETAL SEE DETAIL 3/E5

12/21/12



RH
DRAWN BY: DATE: DECEMBER 21, 2012
SR
CHECKED BY: DATE: DECEMBER 21, 2012

REVISED BY: DATE: DECEMBER 21, 2012
SR
APPROVED BY: DATE: DECEMBER 21, 2012

APPROVED BY: DATE: DECEMBER 21, 2012
SR
APPROVED BY: DATE: DECEMBER 21, 2012



**Montana Fish
Wildlife & Parks**

ONE-LINE DIAGRAM SERVICE S3
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET: **E3**

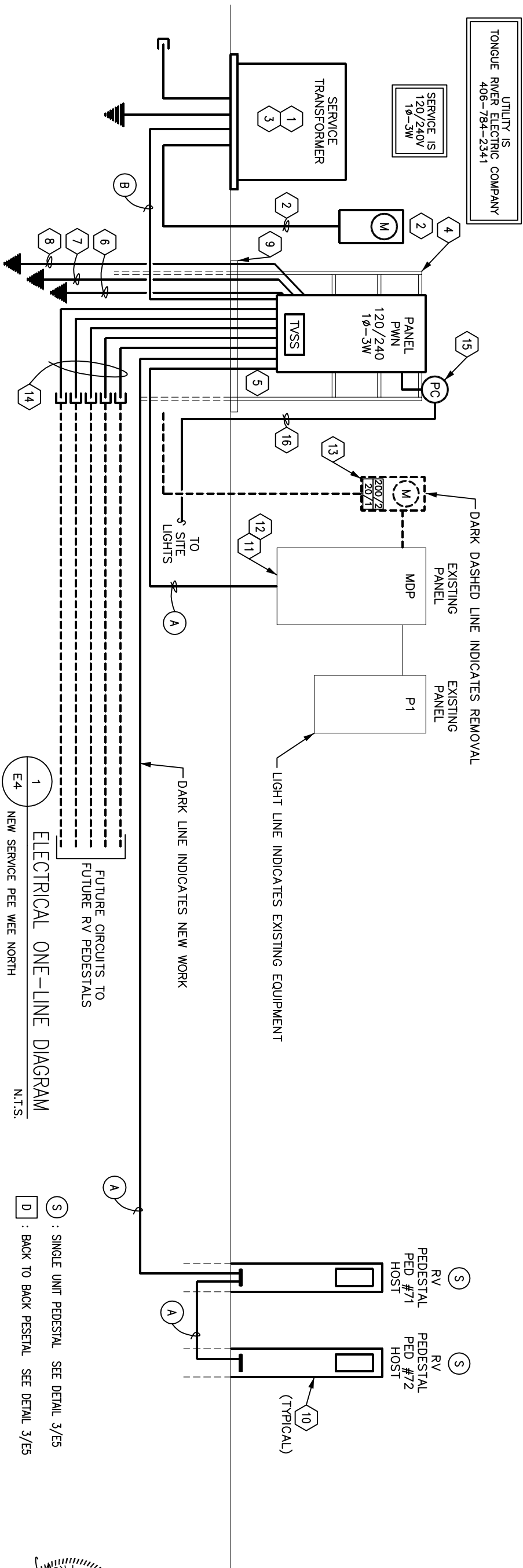
ELECTRICAL NOTES FOR THIS SHEET:

- 1 ELECTRIC UTILITY WILL INSTALL CT'S INSIDE TRANSFORMER CABINET
- 2 ELECTRIC UTILITY WILL PROVIDE AND INSTALL METER AND ENTIRE METER LOOP.
- 3 ELECTRIC UTILITY WILL PROVIDE SERVICE TRANSFORMER
- 4 CONSTRUCT A STURDY UNISTRUT RACK TO SUPPORT ELECTRICAL PANEL. RACK LEGS SHALL BE ENCASED IN CONCRETE FOR A MINIMUM OF 48-INCHES BELOW GRADE.
- 5 BOND AND GROUND SERVICE PER NEC
- 6 #3/0 CU IN 1" C TO METALLIC WATER SERVICE IF AVAILABLE.
- 7 #3/0 CU IN 1" C TO REBAR AND STEEL IN PAD
- 8 #3/0 CU IN 1" C TO THREE (3) 10'-0" GROUND RODS IN A 10'-0" EQUILATERAL TRIANGLE.
- 9 PROVIDE 6-INCH CONCRETE PAD, WITH REBAR REINFORCEMENT, FOR ELECTRICAL PANEL.
- 10 RV PEDESTAL. SEE DETAIL ON SHEET E5.
- 11 CONNECT NEW FEEDER TO EXISTING PANEL MDP.
- 12 REMOVE EXISTING NEUTRAL TO GROUND BONDING AT EXISTING SERVICE. SERVICE SHALL BE BONDED AT ONLY ONE POINT, AT PANEL PWN.
- 13 REMOVE EXISTING SERVICE LATERAL, EXISTING METER, AND ALL ELECTRICAL UPSTREAM FROM EXISTING PANEL MDP.
- 14 FIVE (5) - 2 1/2" EMPTY CONDUITS. STUB OUT 10 FEET BEYOND PAD IN THE DIRECTION OF THE CAMPSITES AND CAP BELOW GRADE. STAKE LOCATION OF EACH CONDUIT FOR IDENTIFICATION.
- 15 PHOTOCELL. TORK #2104. 2000 WATTS, 208-277 VAC. CIRCUIT TO DIRECTLY CONTROL SITE LIGHTS.
- 16 SITE LIGHTING CIRCUIT. SEE SHEET E53 FOR CIRCUIT DETAILS.

NOTE: ELECTRIC UTILITY COMPANY COSTS FOR THEIR ASSOCIATED WORK SHALL BE BILLED DIRECT TO OWNER. DO NOT INCLUDE IN BID PRICE. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COORDINATION AND SCHEDULING OF THE ELECTRIC UTILITY COMPANY'S WORK.

FEEDER SCHEDULE

TAG	CONDUCTORS	CONDUIT
A	3 - #3/0 AND 1 - #2 GRD	2.5 INCH
B	(2) - PARALLEL RUNS OF 3 - #350 MCM AND 1 - #3/0 GRD	(2) - 4 INCH
C	3 - #2 AND 1 - #2 GRD	1.5 INCH



1	ELECTRICAL ONE-LINE DIAGRAM	N.T.S.
E4	NEW SERVICE PEE WEE NORTH	

(S) : SINGLE UNIT PEDESTAL SEE DETAIL 3/E5
 (D) : BACK TO BACK PESTAL SEE DETAIL 3/E5

12/21/12

RH DECEMBER 21, 2012

DRAWN BY: DATE:

SR DECEMBER 21, 2012

CHECKED BY: DATE:

REVISÉD BY: DATE:

APPROVED BY: DATE:

SR DECEMBER 21, 2012

APPROVED BY: DATE:

APPROVED BY: DATE:



Montana Fish, Wildlife & Parks

ONE-LINE DIAGRAM PEE WEE NORTH
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



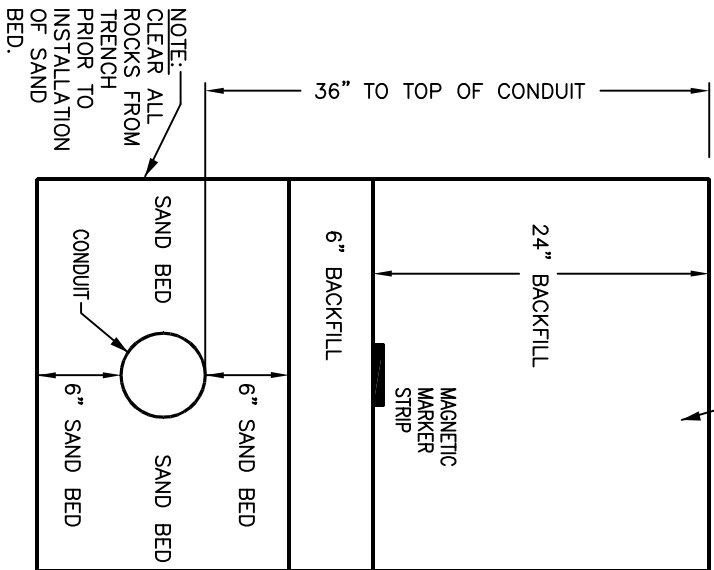
LARSON
CIVIL
ENGINEERING, LLC

28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsence.com

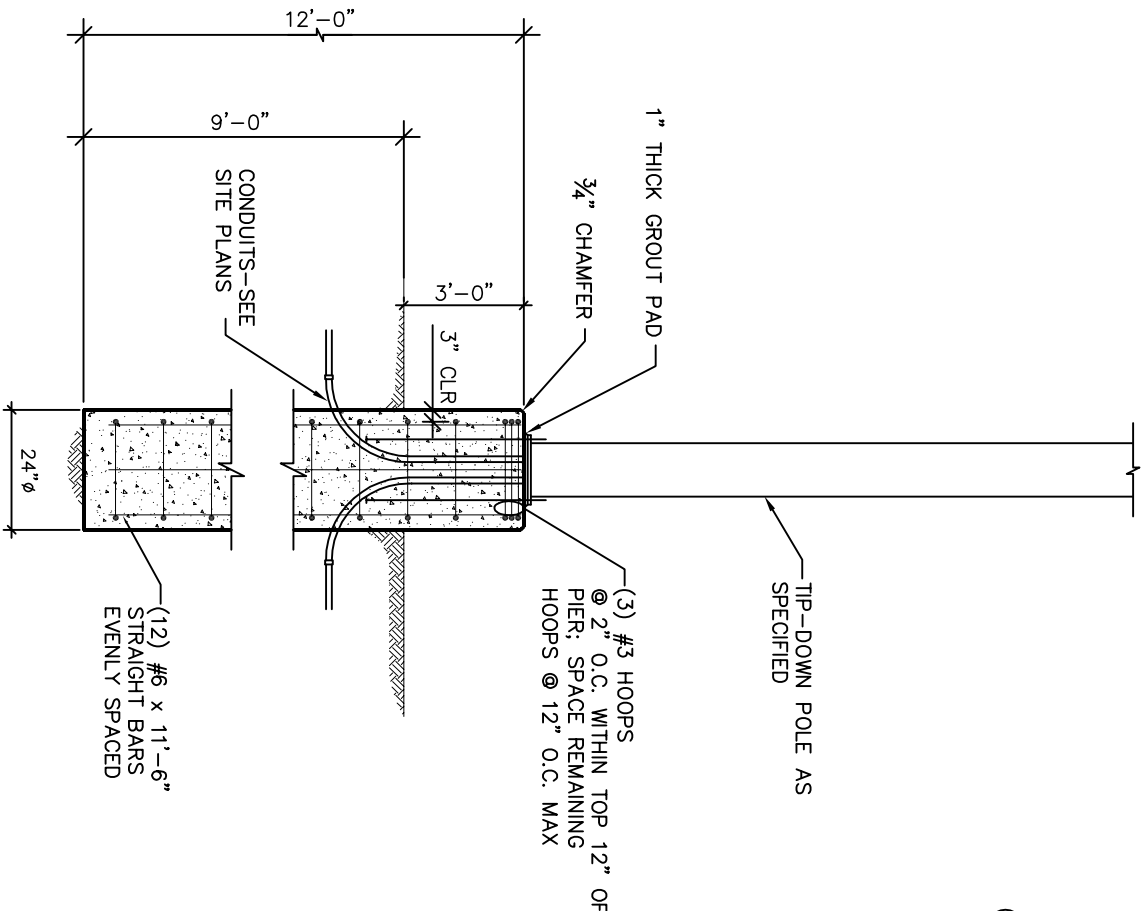
SHEET:
E4

225

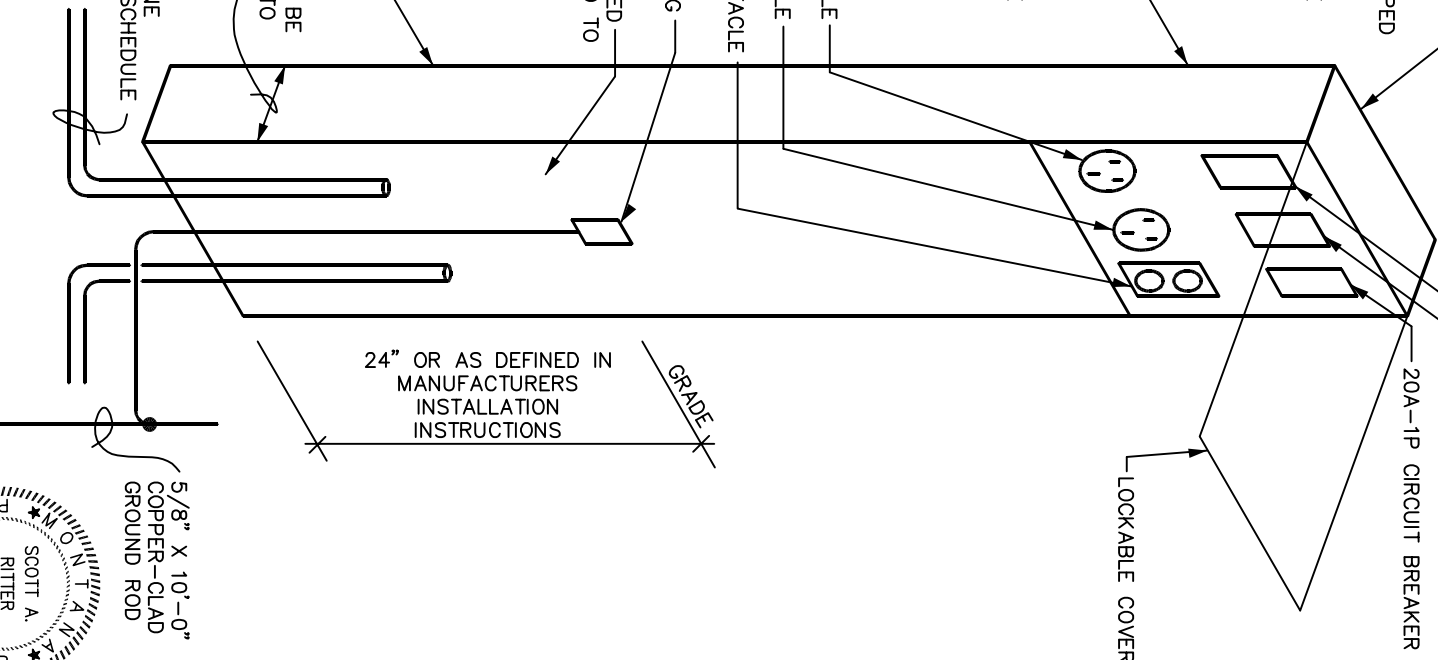
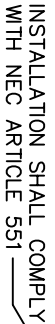
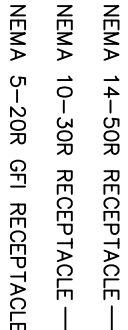
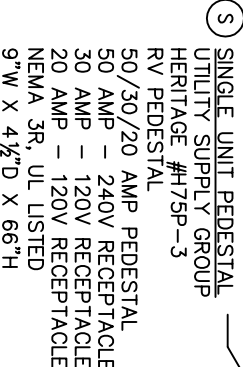
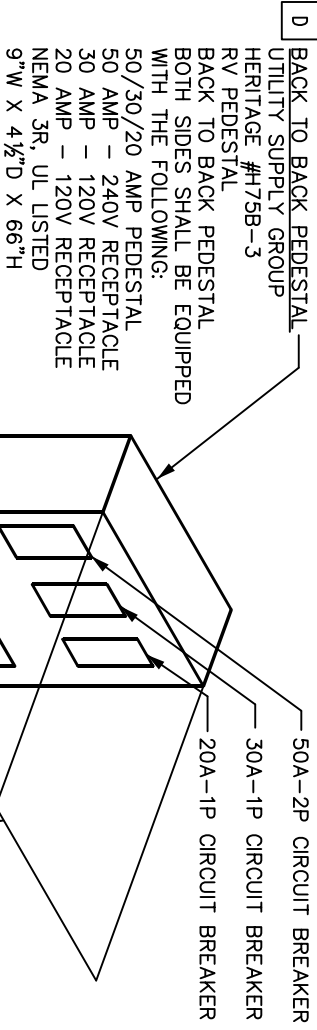
SEE CIVIL SPECIFICATIONS FOR COMPACTION REQUIREMENTS. TRENCH AND COMPACTION REQUIREMENTS WILL BE STRICTLY ENFORCED.



1 UNDERGROUND CONDUIT DETAIL
TRENCH DETAIL
(TYPICAL FOR ALL BELOW GRADE CONDUIT RUNS)
N.T.S.



2 LIGHT POLE FOUNDATION DETAIL
N.T.S.



3 RV PEDESTAL DETAIL
TYPICAL FOR EACH RV PEDESTAL SHOWN
N.T.S.



RH
DRAWN BY: DATE: DECEMBER 21, 2012
SR
CHECKED BY: DATE: DECEMBER 21, 2012

REVISD BY: DATE:
SR
APPROVED BY: DATE:

APPROVED BY: DATE:
APPROVED BY: DATE:



Montana Fish & Wildlife
Partners

ELECTRICAL DETAILS
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

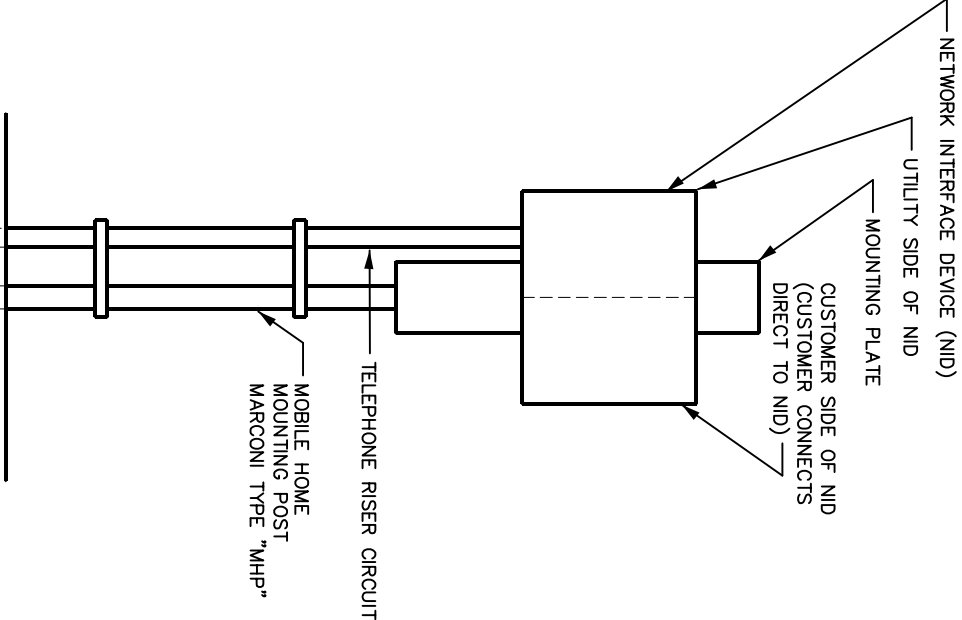
SHEET: **E5**

ELECTRICAL LEGEND

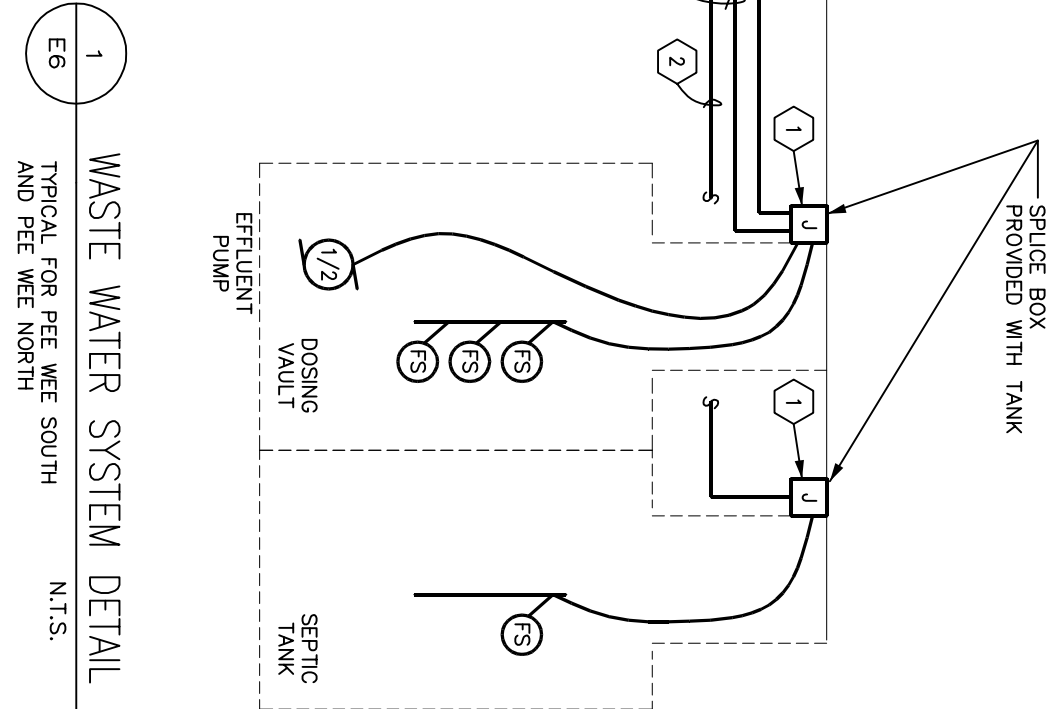
	PANEL
	HOME RUN TO PANEL, NO. OF ARROWS INDICATES NO. OF CIRCUITS.
	NO. OF HASH MARKS INDICATES NO. OF CONDUCTORS IN CONDUIT. NO HASH MARKS INDICATES TWO CONDUCTORS-GROUND CONDUCTORS ARE NOT INCLUDED IN WIRE COUNT.
	DASHED LINE INDICATES FIELD WIRING
	DISCONNECT
	COMB. MOTOR STARTER-DISCONNECT
	LIGHT FIXTURE, FLUORESCENT, SURFACE MOUNTED
	LIGHT FIXTURE, PENDANT MOUNTED
	EMERGENCY LIGHT
	LIGHT FIXTURES, WALL MOUNTED
	SWITCH
	SWITCH, MOTOR STARTER/DISCONNECT
	OUTLET, DUPLEX
	OUTLET, MOTOR, HORSEPOWER INDICATED
	OUTLET, MOTOR
	OUTLET, THERMOSTAT
	OUTLET, SPECIAL PURPOSE
	OUTLET, JUNCTION BOX
	PHOTO CELL
	WEATHERPROOF
	GROUND FAULT INTERRUPTER
	EXISTING
	INDICATING LIGHT, AMBER
	CONTROL PANEL
	ELAPSED TIME METER
	FLOW METER
	FLOW SWITCH
	LEVEL SWITCH
	LEVEL TRANSMITTER
	MOTOR STARTER
	PRESSURE TRANSMITTER
	PRESSURE SWITCH
	SOLENOID VALVE
	TWISTED SHIELDED PAIR

ALL EQUIPMENT WILL BE PROVIDED AND INSTALLED BY TELEPHONE UTILITY (RANGE TELEPHONE)

PROVIDE TELEPHONE PEDESTALS AT ALL LOCATIONS SHOWN ON THE PLANS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH RANGE TELEPHONE.



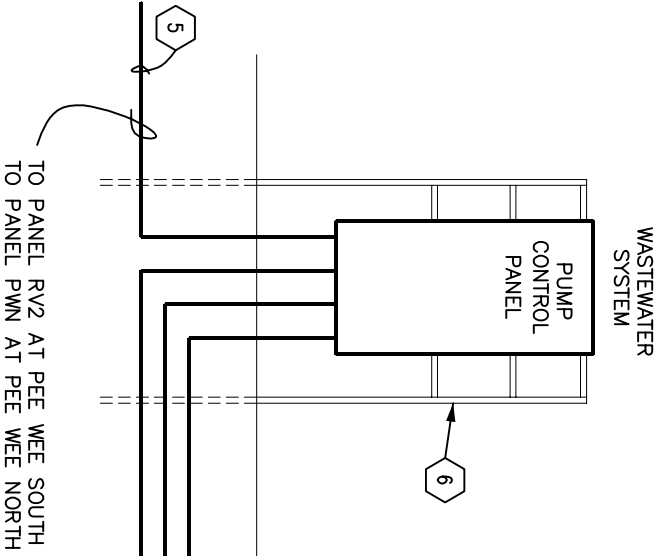
2 TELEPHONE PEDESTAL DETAIL
E6
N.T.S.



1 WASTE WATER SYSTEM DETAIL
E6
TYPICAL FOR PEE WEE SOUTH AND PEE WEE NORTH
N.T.S.

ELECTRICAL NOTES FOR THIS SHEET:

- 1 SPICE CONDUCTORS TO FACTORY CORDS IN SPICE BOX. SPLICES SHALL UTILIZE A COPPER COMPRESSION CONNECTOR AND HEAT SHRINK SLEEVE, AND SHALL BE WATERTIGHT.
- 2 #12 AND 1 #12 GRD IN 1"C. FLOAT CIRCUIT
- 3 6 #12 AND 1 #12 GRD IN 1"C. FLOAT CIRCUIT
- 4 2 #10 AND 1 #10 GRD IN 1"C. PUMP CIRCUIT
- 5 3 #6 AND 1 #6 GRD IN 1 1/4"C
- 6 CONSTRUCT STURDY UNISTRUT RACK TO SUPPORT CONTROL PANEL. RACK LEGS SHALL BE ENCASED IN CONCRETE FOR A MINIMUM OF 48-INCHES BELOW GRADE.



RH	DECEMBER 21, 2012	REVISD BY:	DATE:
DRAWN BY:	SR	APPROVED BY:	DATE:
CHECKED BY:	DATE:	APPROVED BY:	DATE:

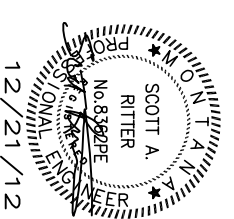


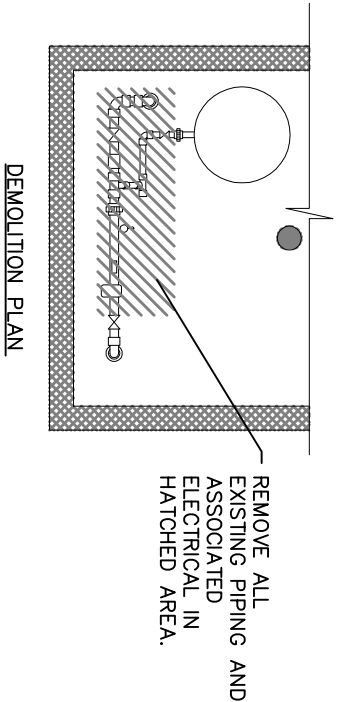
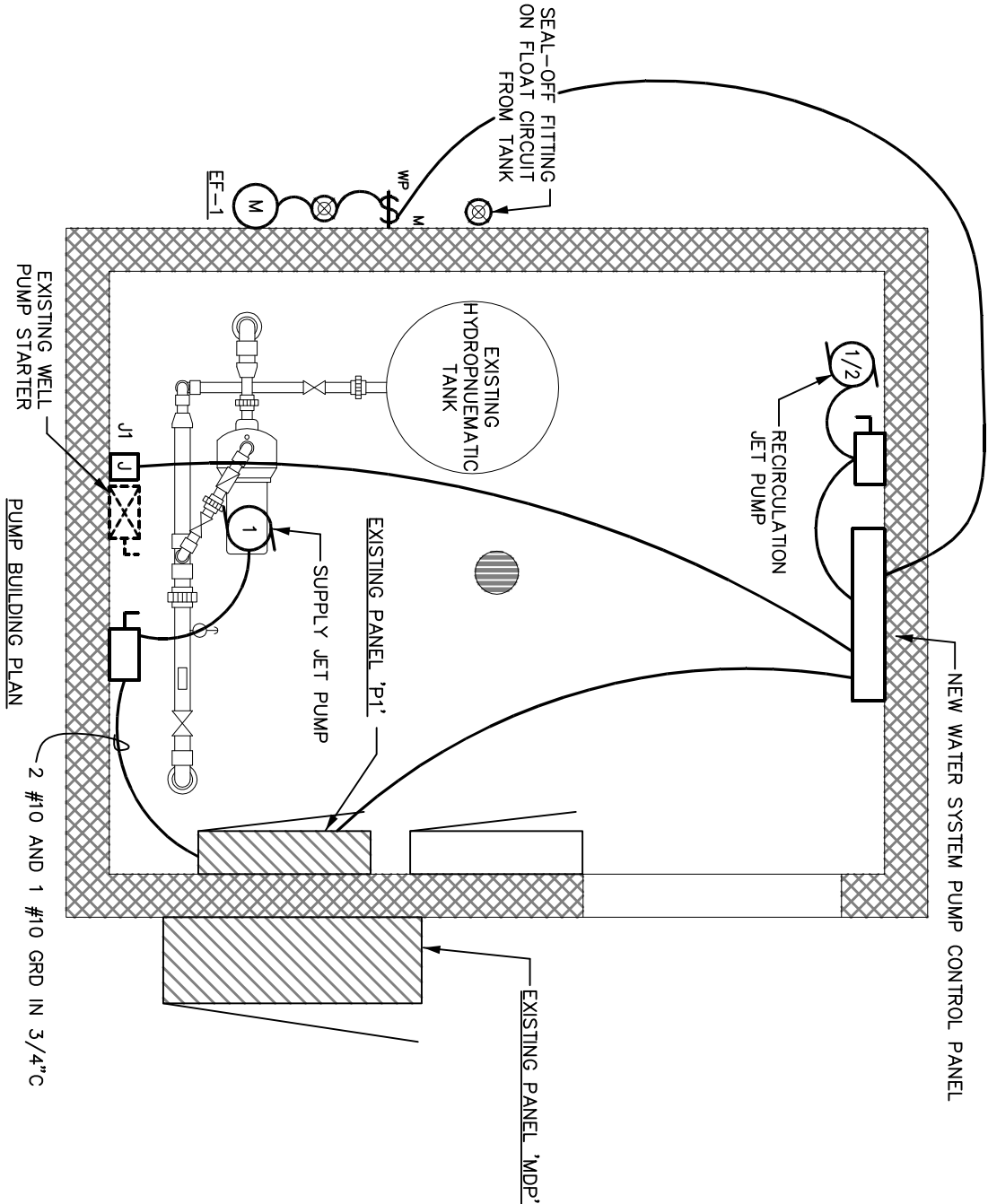
Mongana Fish Wildlife & Parks

ELECTRICAL DETAILS AND LEGEND
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



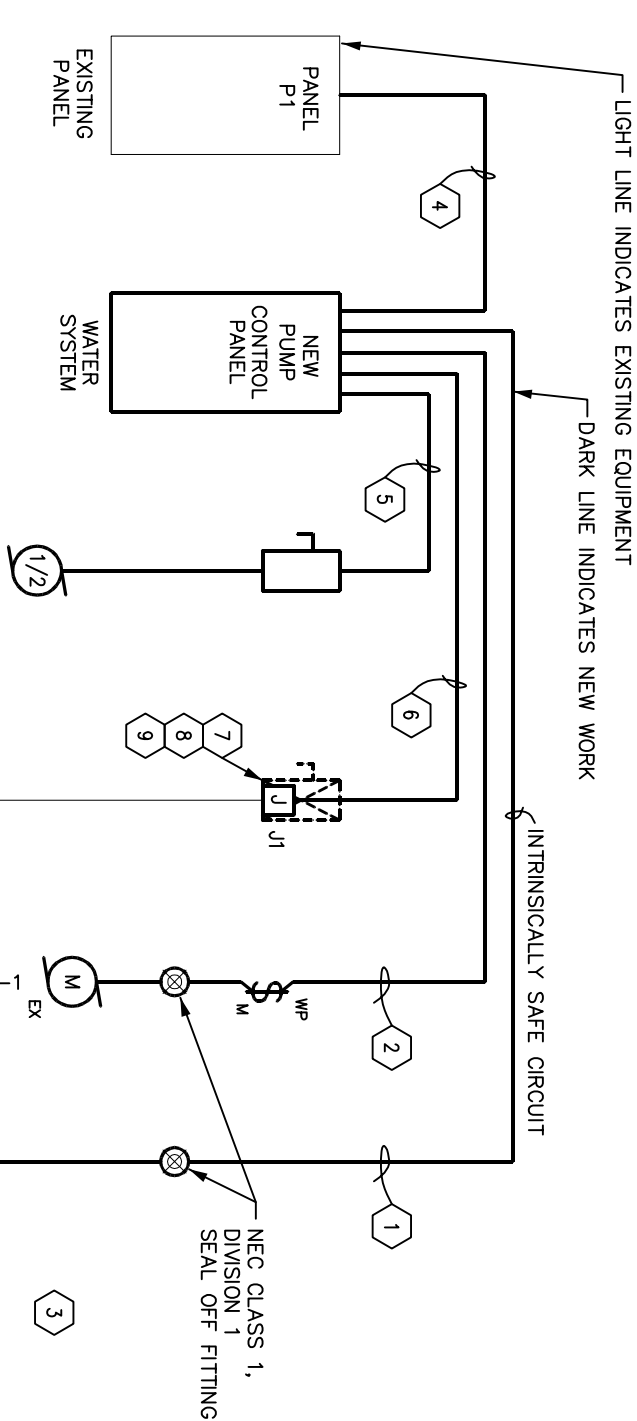
SHEET: E6





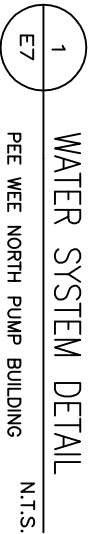
PUMP BUILDING MODIFICATIONS

NO SCALE



ELECTRICAL NOTES FOR THIS SHEET:

- 1 FLOAT CORDS IN 2" RGS CONDUIT
- 2 2 #10 AND 1 #10 GRD IN 3/4" RGS CONDUIT
- 3 CONDUIT IN CLASS 1 LOCATIONS SHALL BE RIGID GALVANIZED STEEL.
- 4 3 #10 AND 1 #10 GRD IN 1" C
- 5 2 #10 AND 1 #10 GRD IN 3/4" C
- 6 6 #10 AND 1 #10 GRD IN 1" C.
- 7 EXISTING WELL PUMP STARTER. REMOVE EXISTING STARTER.
- 8 A NEW STARTER FOR THE EXISTING WELL PUMP WILL BE INSTALLED IN THE NEW PUMP CONTROL PANEL. EXTEND WELL PUMP POWER CIRCUIT FROM EXISTING STARTER LOCATION THROUGH NEW STARTER IN NEW CONTROL PANEL - AND CONNECT TO EXISTING CIRCUIT OUT TO PUMP (AT EXISTING STARTER LOCATION).
- 9 INSTALL NEW JUNCTION BOX IN LOCATION OF EXISTING (REMOVED) WELL PUMP STARTER. USE JUNCTION BOX TO SPLICE NEW WELL PUMP CIRCUITS TO EXISTING WELL PUMP CIRCUITS.

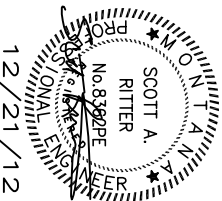


PUMP BUILDING ELECTRICAL PLAN

TONQUE RIVER RESERVOIR STATE PARK
FWP #7096502



28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com



12 / 21 / 12

SHEET: **E7**

MOTOR SCHEDULE

[illegible]

MOTOR SCHEDULE NOTES

- 1 A CONTROL PANEL IS BEING SUPPLIED WITH THE PUMP. SEE PUMP SPECIFICATIONS FOR ADDITIONAL DETAILS. INSTALL AND CIRCUIT CONTROL PANEL AS REQUIRED.
- 2 A CONTROL PANEL IS BEING SUPPLIED WITH THE EQUIPMENT. THE CONTROL PANEL WILL CONTROL THE EXISTING WELL PUMP, THE NEW RECYCLE JET PUMP, AND THE EXHAUST FAN. SEE MECHANICAL SPECIFICATIONS FOR ADDITIONAL DETAILS. INSTALL AND CIRCUIT THE CONTROL PANEL AS REQUIRED.
- 3 REMOVE EXISTING WELL PUMP STARTER.

LIGHT FIXTURE SCHEDULE

TAG	MANUFACTURER	CATALOG NUMBER	LAMP TYPE	MOUNTING	FIXTURE SCHEDULE NOTES
A	LITHONIA - FIXTURES	(2): KSF2-250M-R2-MT-SCWA-12"ARM	(2) - 250W MH	2 at 180 Degrees	NOTES: 8-13
	LITHONIA - POLE	STSH 25 6-4B (2 at 180 Degrees) FBC DDB			NOTES: 1-5
	LITHONIA - WINCH	STSHWCH			NOTES: 6-7

LIGHT FIXTURE SCHEDULE NOTES

- 1 SQUARE TAPERED STEEL HINGED POLE. HINGED POLE ALLOWS SINGLE PERSON RELAMPING FROM THE GROUND
- 2 25 FOOT POLE. 6.41" BASE x 3.63" TOP x 25' TALL. 0.125" WALL THICKNESS.
- 3 9.3 EPA AT 100MPH WITH 1.3 GUST FACTOR. 12.5" BOLT CIRCLE.
- 4 PROVIDE MOUNTING PROVISIONS AS REQUIRED FOR TWO (2) FIXTURES AT 180 DEGREES
- 5 DARK BRONZE FINISH. ALSO PROVIDE FULL BASE COVER.
- 6 PROVIDE ONE (1) TOTAL WINCH FOR THE PROJECT.
- 7 WINCH SHALL BE REMOVABLE AND SHALL BE INSTALLED ONLY DURING MAINTENANCE
- 8 MULTI-TAP BALLAST. WIRED AT 240 VOLT
- 9 ALUMINUM HOUSING. DARK BRONZE FINISH. TWO (2) FIXTURES PER POLE.
- 10 FULL CUTOFF DISTRIBUTION. 0.125" THICK IMPACT RESISTANT TEMPERED GLASS LENS
- 11 PULSE START METAL HALIDE LAMP AND BALLAST.
- 12 ROADWAY TYPE II DISTRIBUTION.

RH	DECEMBER 21, 2012
DRAWN BY:	DATE:
SR	DECEMBER 21, 2012
CHECKED BY:	DATE:

REVISED BY:	DATE:
SR	DECEMBER 21, 2012
APPROVED BY:	DATE:

APPROVED BY:	DATE:
APPROVED BY:	DATE:



Montana Fish, Wildlife & Parks

ELECTRICAL SCHEDULES
TONGUE RIVER RESERVOIR STATE PARK
FWP #7096502



28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET:

FlO

